

What is claimed is:

1. A tampon applicator assembly comprising:

a barrel having a main section disposed between an insertion tip and a finger grip, said finger grip having a gripping region disposed between a first region and a second region;

a plunger being slidably received in said barrel; and

a pledget being disposed in said barrel between said insertion tip and said plunger so that a force applied on said plunger expels said pledget from said barrel at said insertion end,

wherein said first and second regions each have an outer dimension that is about 10% to about 30% larger than an outer dimension of said gripping region.

2. The assembly as in claim 1, wherein said outer dimensions of said first and second regions are equal or different in size.

3. The assembly as in claim 1, wherein said outer dimension of said first region is about 25% larger than said outer dimension of said gripping region.

4. The assembly as in claim 1, wherein said outer dimension of said second region is about 15% larger than said outer dimension of said gripping region.

5. The assembly as in claim 1, wherein said main section has a maximum outer dimension located closer to said finger grip than to said insertion tip.

6. The assembly as in claim 1, wherein said main section has a taper of about 1.07 to about 1.15.

7. The assembly as in claim 1, wherein said insertion tip further comprises a plurality of petals.

8. The assembly as in claim 7, wherein said insertion tip has a taper ratio of between about 0.66 and about 1.6.

9. The assembly as in claim 7, wherein said plurality of petals have a petal length-to-width ratio of about 0.8 to about 3.

10. The assembly as in claim 9, wherein said petal length-to-width ratio is over about 2.

11. A tampon applicator assembly comprising:

a barrel having a main section disposed between an insertion tip and a finger grip, said main section having a maximum outer dimension located closer to said finger grip than to said insertion tip;

a plunger being slidably received in said barrel; and

a pledget being disposed in said barrel between said insertion tip and said plunger so that a force applied on said plunger expels said pledget from said barrel at said insertion end.

12. The assembly as in claim 11, wherein said maximum outer dimension is located from said insertion tip about 55% to 85% of an overall length of said barrel.

13. The assembly as in claim 12, wherein said maximum outer dimension is located from said insertion tip about 60% to 75% of said overall length of said barrel.

14. The assembly as in claim 11, wherein said main section has a main section taper ratio of about 1.07 to about 1.15.

15. The assembly as in claim 14, wherein said main section taper ratio is about 1.08 to about 1.13.

16. The assembly as in claim 11, wherein said insertion tip further comprises a plurality of petals.

17. The assembly as in claim 11, wherein said insertion tip has a taper ratio of between about 0.66 and about 1.6.

18. The assembly as in claim 17, wherein said taper ratio is between about 0.7 and about 0.9.

19. The assembly as in claim 16, wherein said plurality of petals have a petal length-to-width ratio of about 0.8 to about 3.

20. The assembly as in claim 19, wherein said petal length-to-width ratio is over about 2.

21. A tampon applicator assembly comprising:

a barrel having a main section disposed between an insertion tip and a finger grip, said main section having a main section taper ratio of about 1.07 to about 1.15;

a plunger being slidably received in said barrel; and

a pledget being disposed in said barrel between said insertion tip and said plunger so that a force applied on said plunger expels said pledget from said barrel at said insertion end.

22. The assembly as in claim 21, wherein said main section taper ratio is about 1.08 to about 1.13.

23. The assembly as in claim 21, wherein said main section has a maximum outer dimension located closer to said finger grip than to said insertion tip.

24. The assembly as in claim 23, wherein said maximum outer dimension is located from said insertion tip about 55% to 85% of an overall length of said barrel.

25. The assembly as in claim 21, wherein said finger grip has a gripping region disposed between a first region and a second region, said first and second regions each having an outer dimension that is about 10% to about 30% larger than an outer dimension of said gripping region.

26. The assembly as in claim 21, wherein said insertion tip further comprises a plurality of petals.

27. The assembly as in claim 26, wherein said plurality of petals have a petal length-to-width ratio of about 0.8 to about 3.

28. The assembly as in claim 27, wherein said petal length-to-width ratio is over about 2.

29. The assembly as in claim 21, wherein said insertion tip has a taper ratio of between about 0.66 and about 1.6.

30. The assembly as in claim 29, wherein said taper ratio is between about 0.7 and about 0.9.

31. A tampon applicator assembly comprising:

a barrel having a main section disposed between an insertion tip and a finger grip, said insertion tip having a plurality of petals and a taper ratio of more than about 0.66;

a plunger being slidably received in said barrel; and

a pledget being disposed in said barrel between said insertion tip and said plunger so that a force applied on said plunger opens said plurality of petals to expel said pledget from said barrel at said insertion end.

32. The assembly as in claim 31, wherein said main section has a maximum outer dimension located closer to said finger grip than to said insertion tip.

33. The assembly as in claim 31, wherein said main section has a main section taper ratio of about 1.08 to about 1.13.

34. The assembly as in claim 31, wherein said finger grip has a gripping region disposed between a first region and a second region, said gripping region having an outer dimension that is smaller than an outer dimension of each of said first and second regions.

35. The assembly as in claim 31, wherein said plurality of petals have a petal length-to-width ratio of about 0.8 to about 3.

36. The assembly as in claim 35, wherein said petal length-to-width ratio is over about 2.

37. A tampon applicator assembly comprising:

a barrel having a main section disposed between an insertion tip and a finger grip, said insertion tip having a plurality of petals, said plurality of petals having a petal length-to-width ratio over about 2 to about 3;

a plunger being slidably received in said barrel; and

a pledget being disposed in said barrel between said insertion tip and said plunger so that a force applied on said plunger opens said plurality of petals to expel said pledget from said barrel at said insertion end.

38. The assembly as in claim 37, wherein said main section has a maximum outer dimension located closer to said finger grip than to said insertion tip.

39. The assembly as in claim 38, wherein said maximum outer dimension is located from said insertion tip about 55% to 85% of an overall length of said barrel.

40. The assembly as in claim 37, wherein said main section has a main section taper ratio of about 1.08 to about 1.13.

41. The assembly as in claim 37, wherein said finger grip has a gripping region disposed between a first region and a second region, said gripping region having an outer dimension that is smaller than an outer dimension of each of said first and second regions.

42. The assembly as in claim 37, wherein said insertion tip has a taper ratio of more than about 0.66.

43. The assembly as in claim 42, wherein said taper ratio is between about 0.7 and 0.9.